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On page 3, please replace the last paragraph with the following rewritten paragraph:

--The filters made of filter paper or paper-like nonwoven material partially or wholly consist of fibrous material containing cellulose. The properties of the filters are substantially enhanced by a special treatment of the material containing cellulose, either prior to or after the manufacture of the filter paper. According to the invention, the treatment is carried out in such a manner that the material containing cellulose is at least partially carbamided with urea up to a nitrogen content of 1 to 4% by mass bonded in amino-methane acid ester groups (carbamide groups), and phosphorylated with phosphoric acid or ammonium phosphate up to a phosphorus content of 3 to 8% by mass.

In addition to high filtration capacity, the filter produced from cellulose-containing material so modified additionally possess the special properties of binding hardening constituents as well as toxic heavy metals, which impair the flavor. An enhanced swelling property of the cellulose fibers is obtained by such a treatment, and a broader field of application is obtained in that way for the filters, which can be preferably employed for the separation of mechanical impurities from liquids and gases. In the case of aqueous solutions that need to be filtrated, the filters possess the advantageous property of exchanging the cations of ion-forming impurities for sodium or ammonium aluminum ions. Absorbed are in

count #2
particular polyvalent cations (hardening constituents, heavy metals etc.) but also cationic tensides, quaternary organic ammonium compounds etc. Other fields of application include dust removal, water technology, in particular in water pipelines, and the use of the filters as air, coffee, smoke or dust filters.--

On page 6, please replace the second complete paragraph with the following rewritten paragraph:

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--It is important that the cellulose-containing fiber material is brought into a particularly reactive form prior to the phosphorylation and carmamidation reaction. Such a so-called activation is carried out by adjusting the moisture content of the cellulose-containing material by adding water to it in an amount of at least 30% by mass of the cellulose-containing material. The cellulose-containing starting material usually already has a water content of from 5 to 25%. In order to achieve the desired activation it is necessary that the cellulose-containing fiber material is subjected to the action of water over a longer period of time. The duration is substantially dependent upon the already existing moisture content of the material and amounts to at least half an hour.--

On page 7, please replace the last paragraph with the following rewritten paragraph:

A⁴ --An important step of the method consists in that prior to the actual phosphorylation and carbamidation, the moisture present in the reaction mixture for the purpose of activation is almost completely expelled. This is achieved by heating the mixture to temperatures of from 60° to 100°C while applying a vacuum at the same time. Only once the water has been distilled off is it permissible to start the phosphorylation and carbamidation reaction, which is carried out by heating the mixture to a temperature of 125 to 155°C while simultaneously applying a vacuum and maintaining a reaction time of at least 15 minutes.--

On page 9, before the first complete paragraph, please insert the following paragraph:

A⁵ --The phosphoric acid or ammonium phosphate is preferably added to the activated cellulose-containing material first and uniformly distributed, and the urea subsequently. The mixing times for admixing the phosphoric acid or ammonium phosphate and the urea amount to 15 minutes each. The reaction components phosphoric acid or ammonium phosphate and urea can be mixed with the cellulose-containing material also at room temperature. Prior to the activation, the cellulose-containing material can be heated to the temperature of the solution of urea and/or phosphoric acid or ammonium phosphate in water.--

On page 9, please replace the last paragraph with the following rewritten paragraph:

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--The phosphorylation and carbamidation of filter paper or paper-like nonwoven material that has already been produced previously in the form of webs from cellulose-containing material is carried out under the following conditions: said starting material is treated with a solution of phosphoric acid and/or ammonium phosphate and urea in water at a molar ratio of urea to phosphorus of 2.5 : 1 to 4.5 : 1, whereby the amount of water is adjusted in such a way that 1 to 8 mols phosphorus per kg cellulose remain in the cellulose-containing starting material. The starting material can be treated on one or both sides by coating it with the solution, or it is impregnated in a bath of the solution in a device operating in cycles.--

On page 10, please replace the first complete paragraph with the following rewritten paragraph:

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--The water is completely expelled by a subsequent vacuum treatment with simultaneous heating of the starting material to a temperature of 60° to 100°C. Thereafter, the phosphorylation and carbamidation reaction is carried out under vacuum as well, at a temperature of 125° to 155°C and in the course of a reaction time of at least 15 minutes. The vacuum is preferably adjusted in each

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case to a value of 5.33 kPa to 26.66 kPa.--

On page 11, please replace the first complete paragraph with the following rewritten paragraph:

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--Example 1

100 g cotton linters (linters 503 of the Buckeye Mephis Company) present in the form of cardboard-like webs was cut into pieces. In a dish, a solution prepared at 60°C from 74.7 ml water, 61.4 g 85% phosphoric acid and 111.3 g urea was poured over said pieces and the dish was turned over frequently. After the solution was completely and uniformly absorbed, the dish was covered airtight and stored for one hour at room temperature. The dish was subsequently placed in a vacuum drying cabinet, a vacuum of 5.33 kPa was applied, and drying was carried out at 90° to 100°C. When no more steam was left to be removed by suction, the temperature was raised to 140°C and maintained for 1.5 hours, whereby the vacuum was maintained as well. Obtained was 191.8 g of an externally unchanged reaction product, which was stirred into water, filtered off and washed until the wash water was free of phosphate. The product was dried in the drying cabinet at 110°C, whereby the yield came to 149.3 g.--

On page 11, please replace the last paragraph with the following rewritten paragraph:

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